

Appl. No. 09/924,260

Claim listing

1. (original) Apparatus for dynamically transforming and caching at least one computer program, the apparatus comprising:

- 5 a. one or more computer readable storage media;
and
 b. computer executable instructions stored in the one or more computer readable storage media, the computer executable instructions comprising:

- 10 i. instructions for dynamically transforming code fragments;
 ii. instructions for caching said code fragments;
 iii. instructions for causing said code
15 fragments to be executed by at least one computer processor; and
 iv. instructions providing an application programming interface enabling said at least one computer program to activate said instructions for
20 dynamically transforming said code fragments and said instructions for caching said code fragments.

2. (original) The apparatus of claim 1, wherein said instructions providing an application programming interface enable said at least one computer program to provide said code
25 fragments for said instructions for dynamically transforming code fragments and for said instructions for caching said code fragments.

3. (original) The apparatus of claim 1, wherein said instructions providing an application programming interface
30 include providing functions for caching and executing a

Appl. No. 09/924,260

specified code fragment.

4. (original) The apparatus of claim 1, wherein said instructions providing an application programming interface include providing functions for configuring behavior of said instructions for dynamically transforming said code fragments and said instructions for caching said code fragments.

5. (original) The apparatus of claim 1, wherein said instructions for dynamically transforming said code fragments comprise instructions for changing memory address references in said code fragments.

6. (original) The apparatus of claim 1, wherein said instructions for dynamically transforming said code fragments comprise instructions for changing the layout of said code fragments while preserving the function of said code fragments.

7. (original) The apparatus of claim 1, wherein said instructions providing an application programming interface include instructions for accessing code fragments across a network.

8. (original) The apparatus of claim 1, wherein said at least one computer program comprises at least one emulator.

9. (currently amended) The apparatus of claim 1, wherein said at least one computer program comprises a plurality of emulators being executed simultaneously.

10. (original) The apparatus of claim 9, wherein said plurality of emulators comprise emulators for at least two

Appl. No. 09/924,260

different computer architectures.

11. (original) The apparatus of claim 1, wherein said at least one computer program comprises at least one operating system.

5 12. (original) The apparatus of claim 1, said computer executable instructions further comprising instructions for transparently obtaining said code fragments from said at least one computer program for said instructions for dynamically transforming said code fragments and for said instructions for
10 caching said code fragments.

13. (original) The apparatus of claim 12, said computer executable instructions further comprising instructions for controlling the execution of said at least one computer program on said at least one computer processor.

15 14. (original) The apparatus of claim 12, said computer executable instructions further comprising instructions for obtaining optimal portions of code from said at least one computer program to create said code fragments.

20 15. (original) The apparatus of claim 12, wherein said instructions for transparently obtaining said code fragments from said at least one computer program obtain said code fragments across a network.

25 16. (original) The apparatus of claim 1, said computer executable instructions further comprising instructions for optimizing said code fragments.

Appl. No. 09/924,260

17. (original) The apparatus of claim 1, said computer executable instructions further comprising instructions for linking a plurality of said code fragments to create a larger code fragment.

5 18. (currently amended) The apparatus of claim 1, said computer executable instructions further comprising instructions for replacing hardware control code in said code fragments, where said hardware control code is adapted to control hardware which is not present and hardware which is
10 not functioning.

19. (original) Apparatus for dynamically transforming and caching at least one computer program, the apparatus comprising:

a. one or more computer readable storage media;

15 and

b. computer executable instructions stored in the one or more computer readable storage media, the computer executable instructions comprising:

i. instructions for dynamically transforming
20 code fragments;

ii. instructions for dynamically optimizing said code fragments;

iii. instructions for caching said code fragments;

25 iv. instructions for changing hardware control code in said code fragments;

v. instructions for transparently obtaining said code fragments from said at least one computer program;

30 vi. instructions providing an application programming interface enabling said at least one

Appl. No. 09/924,260

computer program to activate said instructions for dynamically transforming and caching said code fragments; and

vii. instructions for causing said code fragments to be executed by at least one computer processor.

20. (currently amended) Apparatus for executing a plurality of software applications, the apparatus comprising:

a. one or more computer readable storage media;

and

b. computer executable instructions stored in the one or more computer readable storage media, the computer executable instructions comprising:

i. instructions for obtaining portions of computer program code from said plurality of software applications, said plurality of software applications comprising emulators;

ii. instructions for dynamically transforming and caching said portions of computer program code to create transformed code fragments; and

iii. instructions for executing said transformed code fragments, wherein a single instantiation of said computer executable instructions causes said executing of said transformed code fragments from said plurality of software applications simultaneously.

21. (cancelled)

22. (original) The apparatus of claim 21, wherein said plurality of software applications emulate computer systems with at least two different instruction set architectures.

Appl. No. 09/924,260

23. (new) The apparatus of claim 9, wherein said plurality of emulators are executed simultaneously on said at least one computer processor using a single instantiation of said instructions for dynamically transforming code fragments.

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ **BLACK BORDERS**
- ☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- ☐ **FADED TEXT OR DRAWING**
- ☐ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- ☐ **SKEWED/SLANTED IMAGES**
- ☐ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- ☐ **GRAY SCALE DOCUMENTS**
- ☒ **LINES OR MARKS ON ORIGINAL DOCUMENT**
- ☐ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- ☐ **OTHER:** _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.